IN THE SPECIFICATION

Please amend the paragraph beginning at page 1, line 22, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected by the photogenic subject 101 or generated by the photogenic subject 101 images the image 105 of the photogenic subject on the imaging device 103 by the image formation lens 102. Many photoelectric transfer devices are arranged on the imaging device 103, one photoelectric transfer device detects the optical intensity reaching a certain space and transfers light to electric signal corresponding to the optical intensity, and it is possible to reproduce the image of photogenic subject 105 imaged on whole of the imaging device on a display or the like by these electric signals and positional informations of arrangement of photoelectric transfer devices.

Please amend the paragraph beginning at page 6, line 12, as follows:

FIG. 13 shows a structure of the imaging apparatus according to Embodiment 8 of the present invention; [[and]]

Please amend the paragraph beginning at page 6, line 14, as follows:

FIG. 14 shows resolution of a conventional imaging apparatus[[.]] ; and

Please add the following new paragraph beginning at page 6, line 16:

FIG. 15 shows an embodiment of the imaging apparatus from an angled perspective.

Please amend the paragraph beginning at page 7, line 13, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the

photogenic subject 101 is imaged on the light-receiving surface of the imaging device 103 by each of four image formation lenses. Each of four image formation lenses forms similar image 2 of photogenic subject on the light-receiving surface of the imaging device 103. Many photoelectric transfer devices, e.g. CCD, are arranged on the light-receiving surface of the imaging device 103, and one photoelectric transfer device detects optical intensity of light reaching to a certain space and transfers to electric signal corresponding to optical intensity. If positional information of photoelectric transfer devices and electric signals are given, it is possible to reproduce four images 2 of photogenic subject and resynthesize these images to one image of photogenic subject.

Please amend the paragraph beginning at page 7, line 26, as follows:

In Fig. 1(b), 61 shows an imaging apparatus having an image formation lens shown in Fig. 1(a) for forming four images 2 of photogenic subject on the light-receiving surface of the imaging device 103, and 62 a signal arrangement converter for reproducing one image of photogenic subject from four images 2 of photogenic subject. The signal arrangement converter 62 is composed of, as a well-known circuit, a memory device such as frame memory, a control circuit to read electric signals from imaging devices and a control circuit for reading electric signals from the memory device with controlling the order of reading. <u>Fig. 15 illustrates the imaging apparatus shown in Fig. 1(a) from an angled perspective.</u> The formation of image of photogenic subject in the above arrangement is explained. The electric signal intensity of one photoelectric transfer device composing the light-receiving surface of the imaging device is read according to arrangement of photoelectric transfer devices (for example, from left of photoelectric transfer devices which are arranged on top in turn. that is, $n_{l,l},\ldots,n_{x,1}$, $n_{,1,2}$, $\ldots n_{x,2},\ldots,\ldots,n_{1,y},\ldots,n_{x,y}$ shown in Fig.2). These electric signals of

photoelectric transfer devices are written once in the memory device of the signal arrangement converter, and they are read out from the memory device again to be displayed on an image screen 109 through an image [[date]] <u>data</u> processing device 108. When these electric signals are written in and read out, these electric signals are rearranged corresponding to the number and position of images of photogenic subject, in other words, each pixel is rearranged as $n_{1,1}$, $n_{(x/2)+1,1}$, $n_{1,(y/2)+1}$, $n_{(x/2)+1,(y/2)+1}$, $n_{2,1}$, $n_{(x/2)+2,1}$, $n_{2,(y/2)+1}$, $n_{(x/2)+2,(y/2)+1}$, $\cdots n_{x/2,1}$, $n_{x,1}$, $n_{x/2,(y/2)+1}$, $n_{x,(y/2)+1}$, $n_{1,2}$, $n_{(x/2)+1,2}$, $n_{1,(y/2)+2}$, $n_{(x/2)+1,(y/2)+2}$, $\cdots n_{x/2,y/2}$, $n_{x,y/2}$, $n_{x/2,y}$, $n_{x,y}$. The electric signals are sent to the image date processing device 108 where one image of photogenic subject is obtained by reading out in this order, so that one image of photogenic subject is displayed on the image display apparatus 109. With this arrangement, the imaging apparatus according to the present invention can synthesize a plurality of images of photogenic subject imaged on the light-receiving surface of the imaging device by a plurality of image formation lenses, to one image of photogenic subject by using a signal arrangement converter.

Please amend the paragraph beginning at page 12 line 8, as follows:

Next, the operation is explained. A [[lay]] <u>ray</u> of light reflected or generated by the photogenic subject 101 is imaged on the light-receiving surface of single imaging device 103 by four image formation lenses 21 unified on the transparent resin. Each of four unified image formation lenses 21 images an image of the photogenic subject 2 on the light-receiving surface of the imaging device 103, and these are resynthesized to get a thinner imaging apparatus compared to the conventional imaging apparatus having the same brightness, angle of field and resolution as those of the present embodiment.

Please amend the paragraph beginning at page 13, line 1, as follows:

Fig.6 shows a structure of the imaging apparatus according to Embodiment 3 of the present invention. In Fig.6, 31 shows unified four (2 lenses in the horizontal direction and 2 lenses in the vertical direction) image formation lenses formed of material having a ~~liner~~ linear expansion coefficient of not more than about 1 x 10^{-5} / °C and built in the lens-barrel, and each of them composes a lens system. The unified four lenses 31 are formed of transparent inorganic material such as glass, and the shape of lenses can be deformed by press working or etching to give a lens effect.

Please amend the paragraph beginning at page 13, line 15, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the photogenic subject 101 is imaged on the light-receiving surface of the imaging device 103 by unified four image formation lenses 31. Each of four unified image formation lenses 21 images an image of the photogenic subject 2 on the light-receiving surface of the imaging device 103, and these are resynthesized to get a thinner imaging apparatus compared to the conventional imaging apparatus having the same brightness, angle of field and resolution as those of the present embodiment.

Please amend the paragraph beginning at page 15, line 21, as follows:

One the other hand, the substrate 41 is formed of transparent inorganic material such as glass on which the image formation lenses la are bonded and formed by thermal compression bonding, adhesion or bicolor forming. Also, as shown in Fig. 8, four holes might be formed in a substrate having a ~~liner~~ linear explanation coefficient of not more than 1

x 10^{-5} / °C for attachment of the image formation lenses 1a, and the image formation lenses 1a might be attached thereto.

Please amend the paragraph beginning at page 16, line 1, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the photogenic subject 101 is imaged on the light-receiving surface of single imaging device 103 by a plurality of image formation lenses 1a formed on the substrate 41. The imaging apparatus with the above arrangement can realize a thinner imaging apparatus than the conventional one having the same brightness, angle of field and resolution as those of the present embodiment. Also, it is sufficient to install only one substrate 41 to which four image formation lenses 1a are bonded or one substrate 42 to which four image formation lenses 1 are attached, thereby simple structure and lightening is realized. Further, the adjustment time for ~~focussing~~ focusing can be advantageously shortened.

Please amend the paragraph beginning at page 17, line 20, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the photogenic subject 101 is imaged on the light-receiving surface of single imaging device 103 by the image formation lenses 52, 52a formed on the substrate 41. The imaging apparatus can realize a thinner imaging apparatus than the conventional one having the same brightness, angle of field and resolution as those of the present embodiment.

Please amend the paragraph beginning at page 19, line 7, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the photogenic subject 101 is imaged on the light-receiving surface of the imaging device 103 by

four image formation lenses 91 (lens assembly). Each of four image formation lenses (lens assembly) forms similar image 2 of photogenic subject on the light-receiving surface of the imaging device 103. Many fine photo-detectors such as CCD are arranged on the light-receiving surface of the imaging device 103, and one photo-detector detects the optical intensity of light reaching to a certain space and transfers to electric signal corresponding to optical intensity.

Please amend the paragraph beginning at page 20, line 16, as follows:

Next, the operation is explained. A [[lay]] ray of light reflected or generated by the photogenic subject 101 passes through the lens assembly having a zoom function end is imaged on the light-receiving surface of single imaging device 103 by four image formation lenses 92 unified on the transparent resin. Each of four unified image formation lenses 92 forms similar image 2 of photogenic subject on the light-receiving surface of the imaging device 103, which images can be ~~reshynthesized~~ resynthesized using the same method as explained in the above embodiments.